ABSTRACT

The invention relates to a. method of using radio frequency waves to artificially create catalytic action in a catalyst-free chemical reaction. To mimic or imitate the catalyst, radio frequency waves are transmitted through the reaction mixture at a signal strength sufficient to electronically reproduce the effect of the physical presence of a selected catalyst. The radio frequency waves have a selected transmission frequency substantially equal to the signal frequency of the selected catalyst as determined by nuclear magnetic resonance. The invention can be used to eliminate the need for expensive metallic catalysts such as platinum.